



Harnessing Advanced Technology for C4ISTAR

A Conceptual Model for Developing C4ISTAR Solutions

Major General Rob Fulton

Capability Manager for Information Superiority

MOD Equipment Capability Customer

Report Documentation Page		
Report Date 25SEP2001	Report Type N/A	Dates Covered (from... to) 25SEP2001 - 27SEP2001
Title and Subtitle Harnessing Advanced Technology for C4ISTAR: A Conceptual Model for Developing C4ISTAR Solutions		Contract Number
		Grant Number
		Program Element Number
Author(s) Fulton, Rob		Project Number
		Task Number
		Work Unit Number
Performing Organization Name(s) and Address(es) ECC CM(IS)		Performing Organization Report Number
Sponsoring/Monitoring Agency Name(s) and Address(es) EOARD PSC 802 BOX 14 FPO 09499-0014		Sponsor/Monitor's Acronym(s)
		Sponsor/Monitor's Report Number(s)
Distribution/Availability Statement Approved for public release, distribution unlimited		
Supplementary Notes See Also ADM001419 for whole conference on CD-ROM. These papers are from the Harnessing Advanced Technology for C4ISTAR, The Second Annual Advanced Technology Conference, held 25-27 September 2001 at The Great Malvern Theatre Complex., The original document contains color images.		
Abstract		
Subject Terms		
Report Classification unclassified		Classification of this page unclassified
Classification of Abstract unclassified		Limitation of Abstract UU
Number of Pages 17		



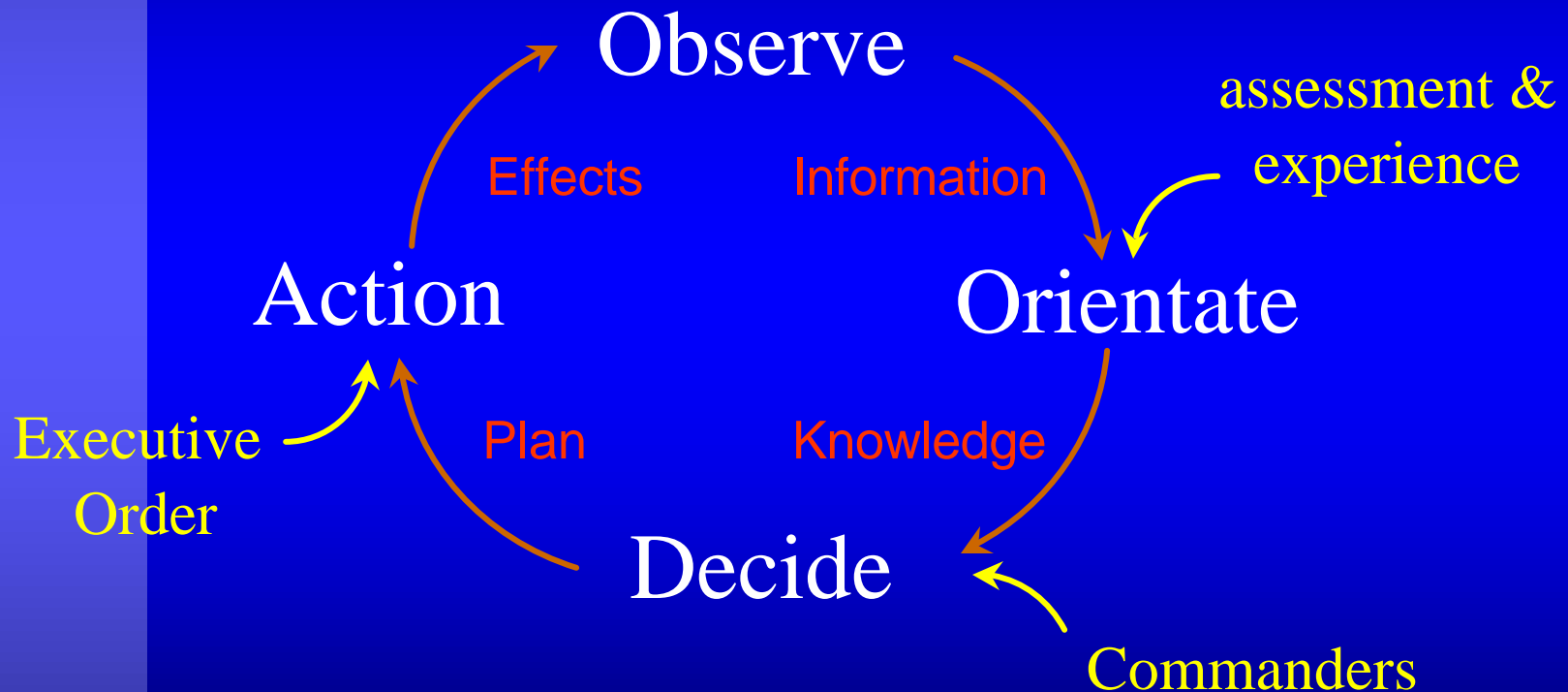
Information Superiority

“the ability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary’s ability to do the same”

“the *right appreciation of information* by decision makers, supporting effective dialogue and mutual comprehension, and enabling commanders at all levels to reach *better decisions*”



Information, Knowledge and Decision Superiority





Information Superiority

- ❑ a fundamental military capability, not a technology
- ❑ it is both relative and transitory
- ❑ relies upon people, training, doctrine as well as equipment
- ❑ enabling *people* to make better decisions in complex and uncertain situations



The role of C4ISTAR

- ❑ Network Enabling Capability
- ❑ Must add value to the process of making *better decisions* about the required effects
- ❑ Effectiveness is measured by its contribution to Military Capability



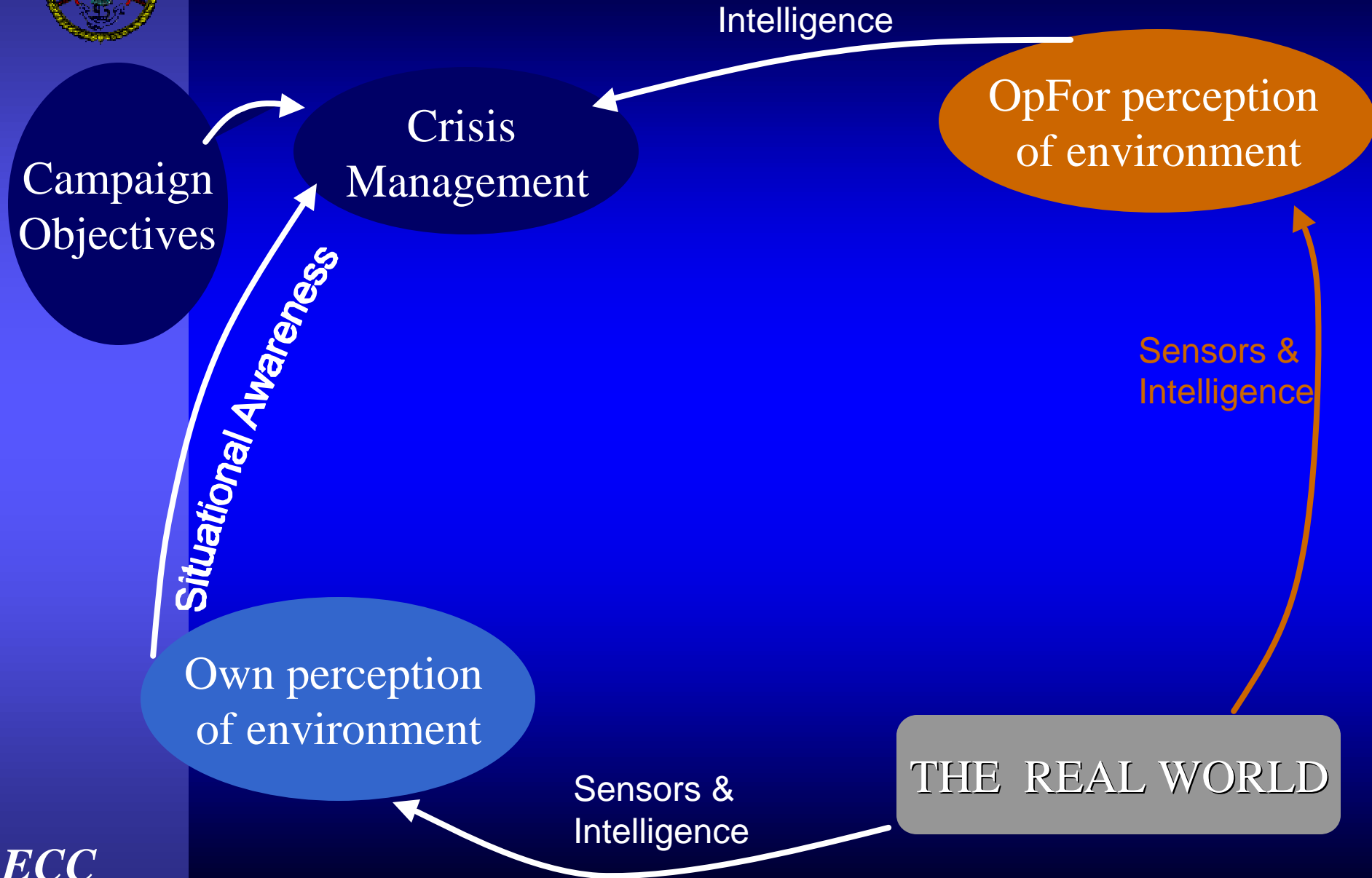
Dimension of the Framework

□ The 6 Lines of Development:

- Doctrine and Concepts
- Structures and Processes
- Equipment Capability
- Personnel
- Collective Training
- Sustainment

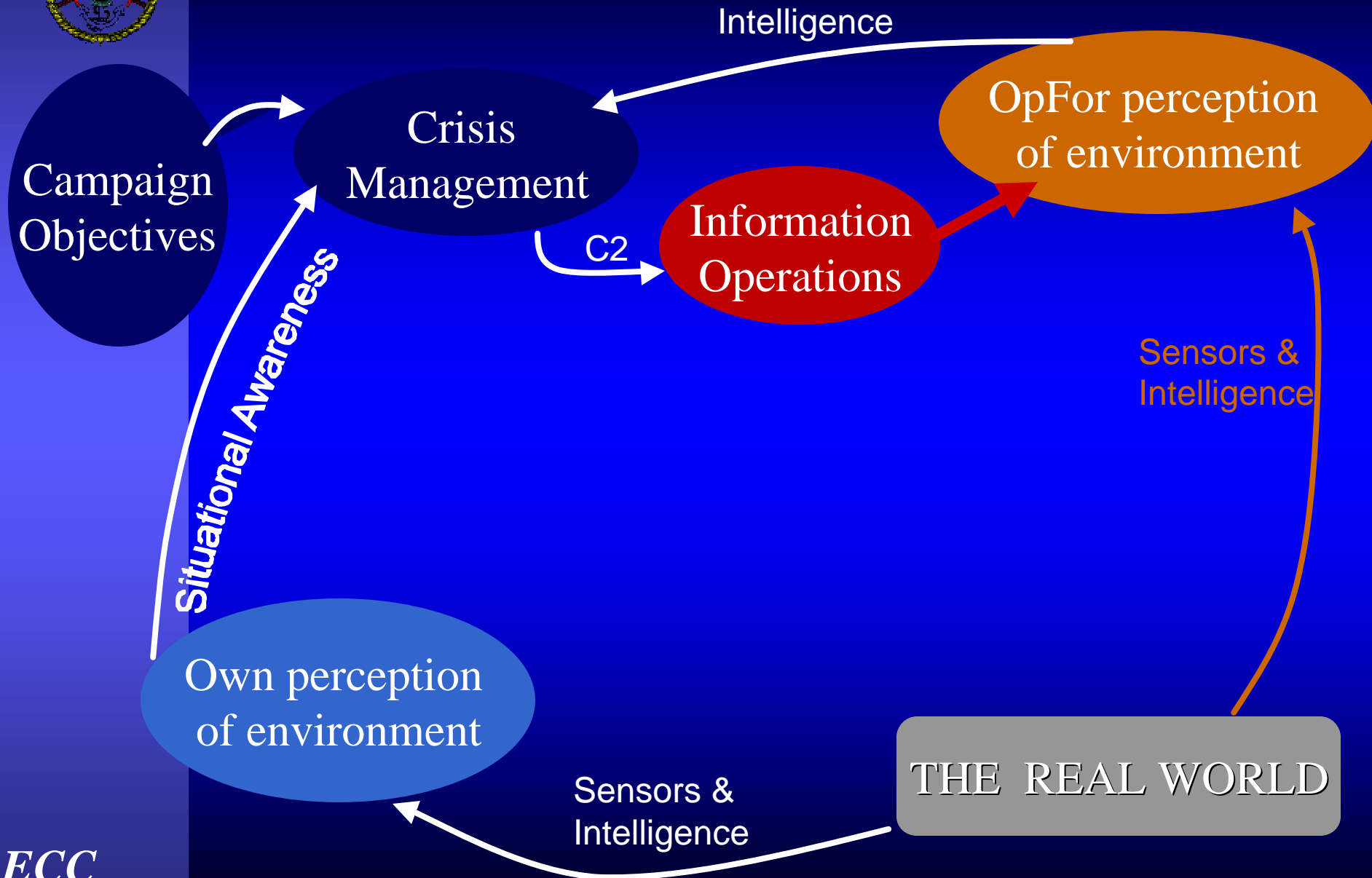


Decision Environment



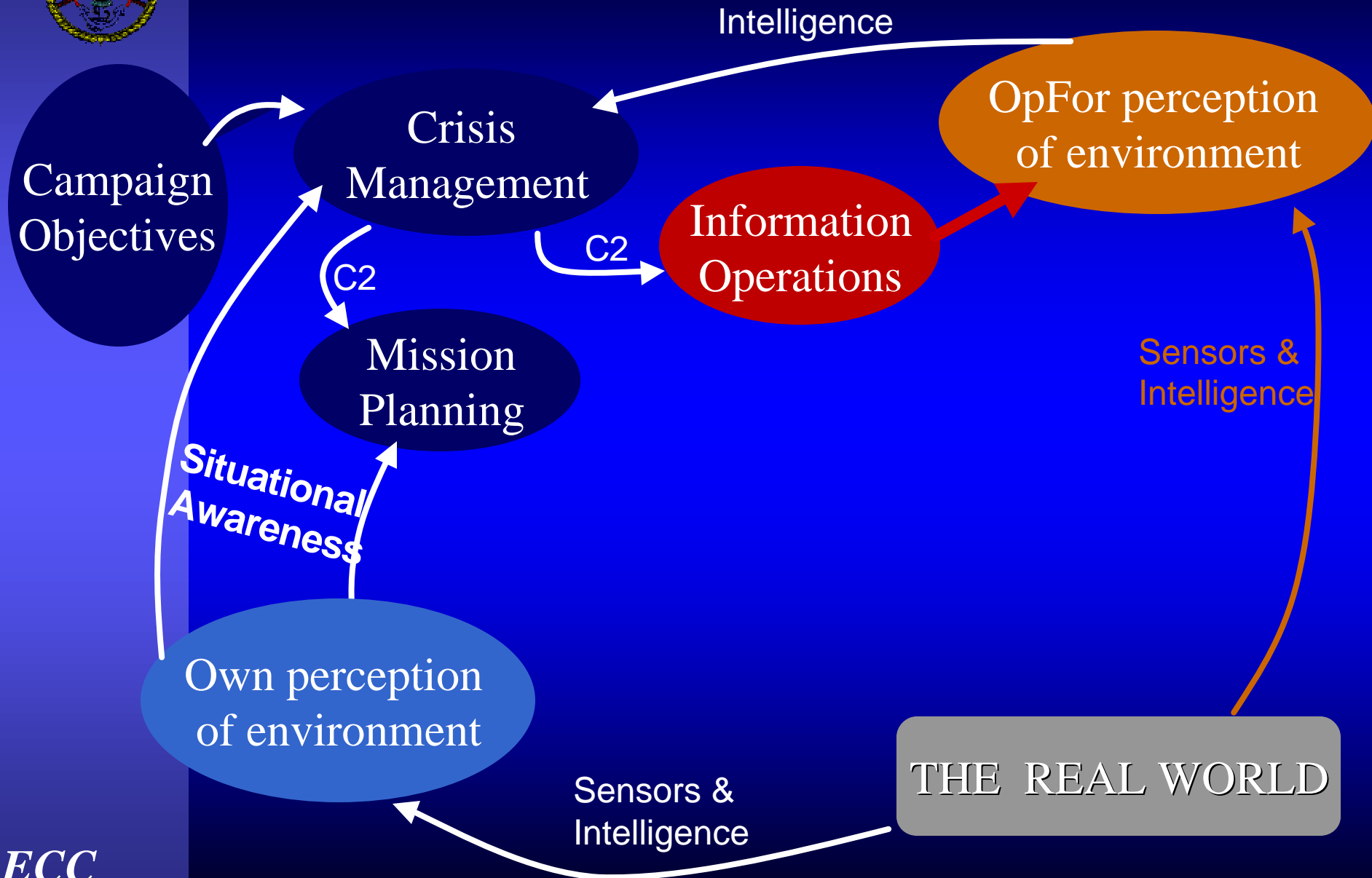


Decision Environment





Decision Environment





Decision Environment





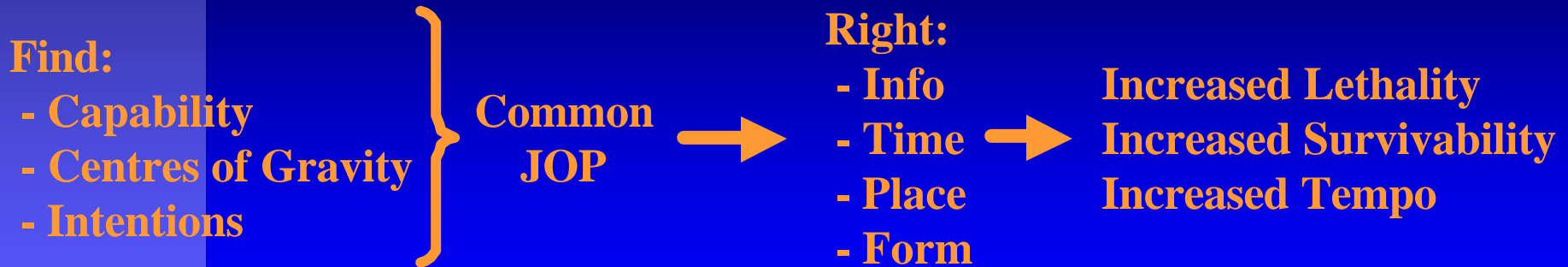
Delivering Required Effects

Delivering Required
Campaign Effects





Enabler: Decision Superiority



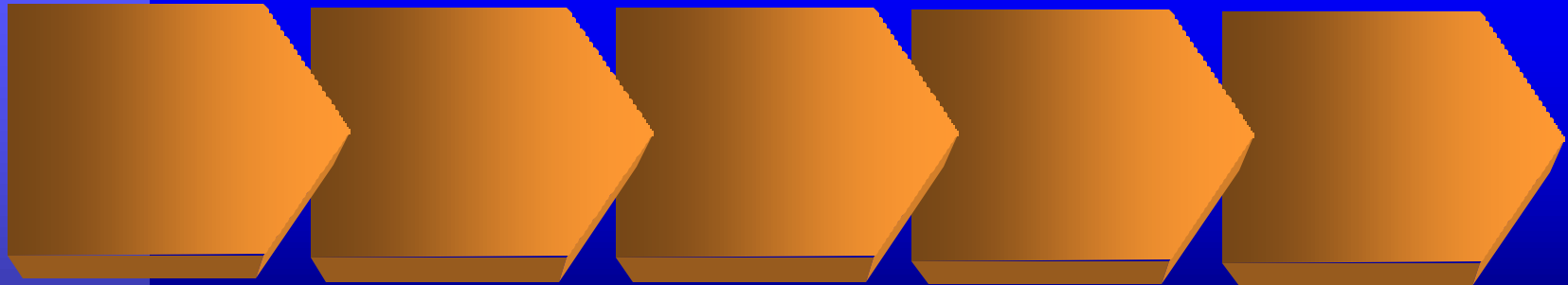
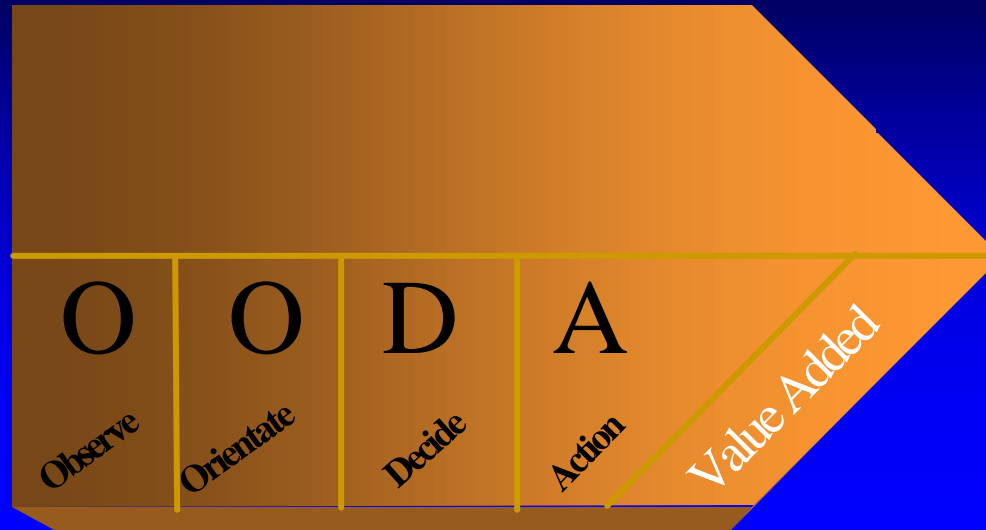
Delivering Required
Campaign Effects





The Information Value Chain

Mission
Command

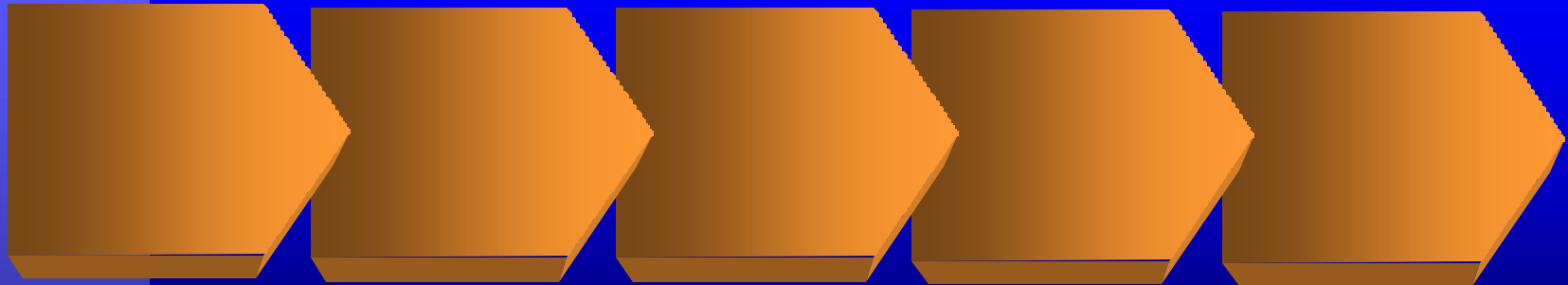




The Information Value Chain

*Lines of
Development*

Mission
Command

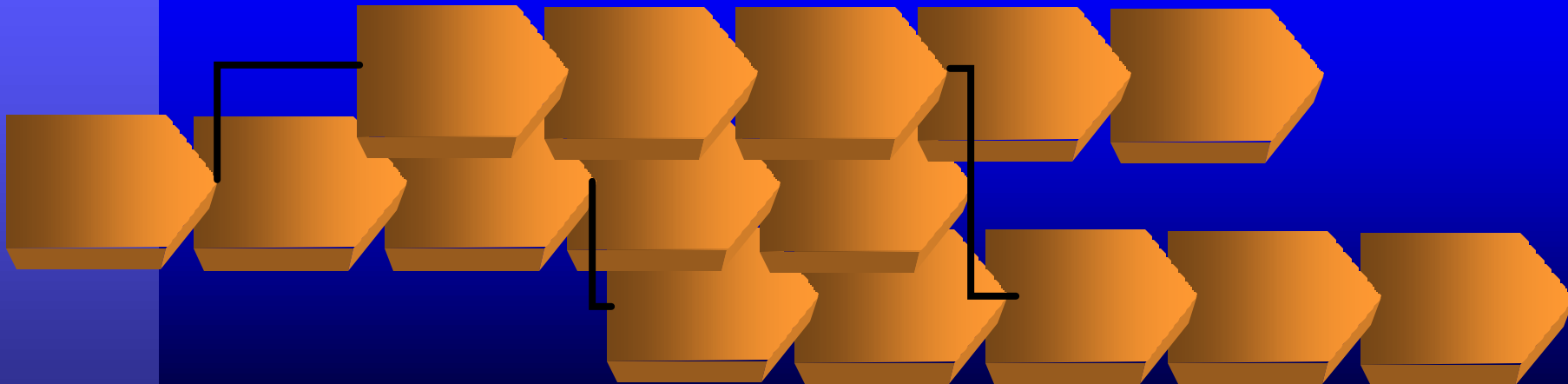
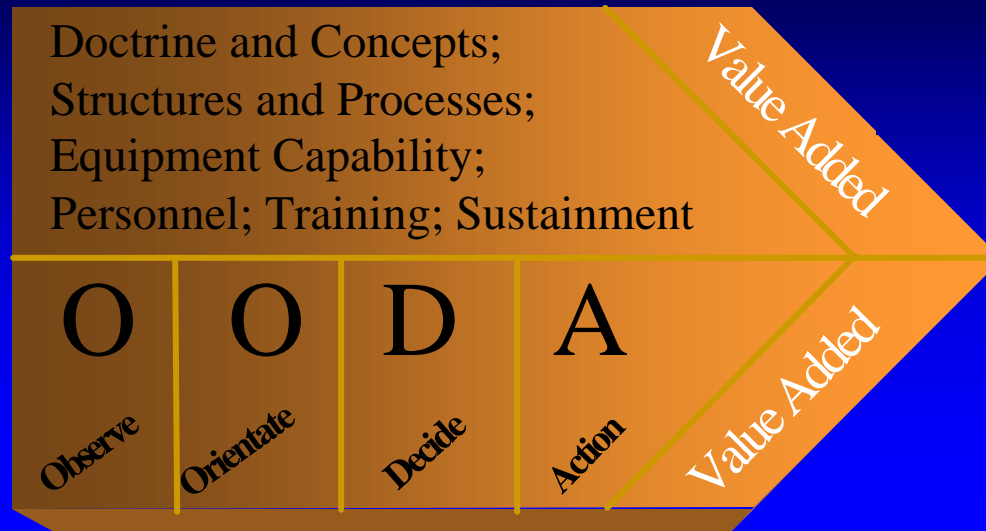




The Information Value Chain

*Lines of
Development*

Mission
Command





In Conclusion

- ❑ The framework for C4ISTAR solutions must:
 - span all Lines of Development
 - identify where information adds the *most* value in the process of delivering the required effect
 - aid Balance of Investment decisions based on the Value of Information
 - contribute to Decision Superiority through the coordinated development of Organisation, Doctrine and Equipment Capability



Decision Superiority

